

**Remarks**

Claims 1-20 are pending in the Application. Claims 1-3, 6-8, and 10-11 stand rejected. Claims 4, 5, 9, and 12-20 have been withdrawn.

**I. Amendments to the Specification**

The Examiner objected to the specification for the use of trademarks without including the generic terminology for the trademark. Applicants have amended the specification on pages 1 and 11 to include the generic terminology for the trademarks. Withdrawal of the objection to the specification is respectfully requested.

**II. Rejection under 35 U.S.C. § 103(a) by JP 11-158733 (Aranaga) in view of US 4,038,452 (Kobayashi)**

The rejection of Claims 1-3, 6-8, and 10-11 under 35 U.S.C. 103(a) as obvious over Aranaga et al. (JP 11-158733) in view of Kobayashi et al. (US 4,038,452) is respectfully traversed.

Aranaga et al. discloses a wet-lay process for forming a non-woven from a bicomponent fiber of polyethylene terephthalate and polypropylene terephthalate having latent crimp. As noted in the present Application on page 2 at the end of the first paragraph, the result is typically a high bulk fabric suitable for non-load-bearing applications, and the full potential of the high recovery fiber is not realized.

Kobayashi et al. relates to a non-woven fabric and more specifically to a bulky non-woven fabric composed of spontaneously crimped acrylonitrile polymer fibers entangled with fibrillated acrylonitrile polymer fibers (column 1, lines 4-8). The non-woven fabric of Kobayashi et al. comprises 50-95% by weight of spontaneously crimped acrylonitrile polymer fibers (column 1, lines 45-47) and 5-50% by

weight of fibrillated fibers of at least one acrylonitrile polymer (column 1, lines 52-53). The fibrillated fibers are characterized as having a plurality of fibrils . . . which are entangled with each other and catch the spontaneously crimped fibers, thereby to provide a non-woven fabric having the desired apparent density (column 3, lines 55-62). At column 7, lines 56-59 Kobayashi et al. discloses that "simultaneously with crimp development, the web is shrunk in surface area and increases in thickness. Any outer mechanical force which restricts such dimensional change should not be given."

The Examiner asserts that it would have been obvious to one having ordinary skill in the art at the time the invention was made to orient the fibers of Aranaga in a well-defined plane, the fibers also having the characteristics of Kobayashi et al., motivated by the expectation of successfully practicing the invention of Aranaga. Applicants respectfully traverse. The bicomponent fibers of Kobayashi et al. are acrylonitrile fibers combined with fibrillated acrylonitrile fibers and undergo crimp development in such a manner that the web increases in thickness, that is, expands in the direction normal to the plane of the fabric. The invention of the present Application is based upon the discovery that entanglement formation among high crimp, high recovery fibers can be incited through a careful control of the fabric expansion in the direction normal to the plane of the fabric during the process of crimp development. In processes of the art crimp development normally leads to extensive shrinkage in the plane with concomitant expansion in the direction normal to the plane (page 3, lines 29-35). As disclosed on page 5 at lines 4-11, when crimp development is performed under conditions in which the expansion of the fabric in the direction normal to the plane thereof is constrained, as for example by performing the crimp development step with the fabric positioned between two metal plates parallel to the plane of the fibrous mat preform, the effect is to cause the fabric to undergo significant densification . . . the result is a denser, tougher fabric with improved stretch recovery. Kobayashi et al. teaches away from the invention of the current Application by disclosing that any outer mechanical force which restricts such

dimensional change should not be given, while the current Application teaches developing crimp under conditions in which the expansion of the fabric in the direction normal to the plane thereof is constrained.

As detailed above, a *prima facie* case of obviousness is not established by Aranaga et al. in view of Kobayashi et al., and therefore the rejection of claims 1-3, 6-8, and 10-11 should be withdrawn.

### Conclusion

This response is intended to be a complete reply. Applicants respectfully submit that claims 1-3, 6-8, and 10-11 are in condition for allowance and respectfully request that the Application be allowed.

Applicants would like to thank the Examiner for the attention and consideration accorded the present Application. Should the Examiner determine that any further action is necessary to place the Application in condition for allowance, the Examiner is encouraged to contact the undersigned by telephone. It is not believed that any fees for extensions of time or the like are required beyond those that are otherwise indicated in the documents accompanying this paper. However, if such additional fees are required, please charge or credit the balance to Deposit Account 50-3223 (Invista North America S. à r. l.).

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Respectfully submitted,

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